SOME CHANGES IN NOMENCLATURE II.

The following are changes in name or in connotation of species that have arisen in the course of work on the preparation of the Flora of the Cape Peninsula. In several cases help in references to the older literature and in other ways has been given by workers overseas, especially by the staffs of the herbaria at Kew and at the British Museum. To these and to others mentioned we desire to express our sincere thanks.

I. By R. S. Adamson.

Afrachneria.

In this genus created by Sprague (Journ. Bot. LX. 138, 1922) for the South African species before placed in the invalid *Achneria* Munro several new combinations are necessary. The species concerned are different in so many characters from those of *Pentaschistis* that it seems best to retain them in a separate genus rather than to sink them in the latter as has been done. (*cf.* McClean S. Af. Journ. Sci. XXIII 281, 1926). The combinations are :—

A. Ecklonii (Nees) Adamson comb. nov.
A. capensis (Steud.) ,, ,, ,,
A. aurea (Nees) ,, ,, ,,
A. ampla (Nees) ,, ,, ,,

Pentameris.

The plant named *Danthonia macrantha* Schrad. in Fl. Cap. VII. 515, 1899 and elsewhere agrees much more closely with the genus *Pentameris* and should be transferred as *P. macrantha* (Schrad.) Nees Linnaea VII. 312, 1832 (ex. syn. cf. Schweicherdt Fedde Repert. XLIII 91, 1938).

Koeleria.

The Cape species is distinct from the northern *K. cristata* Pers. and is *K. capensis* (Thunb.) Nees.

Bromus.

B. japonicus Thunb. Fl. Jap. 52. t111, 1784 antedates *B. patulus* Mert. & Koch in Roeh. Deut. Fl. I. 685, 1823.

B. Gussonei, Parl. is the correct name for the plant known in South Africa as *B. maximus* Desf.

POLYGONUM.

P. undulatum (L) Berg. Desc. Pl. Cap. 135. 1767 antedates *P. atraphaxoides* Thunb. Prod. Pl. Cap. 77, 1794. This is quite distinct from *P. undulatum* Murr. (1775) which is a synonym of *P. alpinum* Vill. *P. salicifolium* Brouss. ex Willd. Enum. Pl. 428, 1809, antedates *P. serrulatum* Lag. Nov. Gen. & Sp. 14, 1816.

RUMEX.

R. sarcorrhizus Link Enum. Hort. Ber. 1, 351. 1821 antedates *R. cordatus* Desf. Cat. Hort. Par. 389. 1829. The name *R. cordatus* was first employed for the species in 1804 (Desf. Tabl. ed. 1. 40) but as no description was given Link's name has priority.

NYMPHAEA.

The Cape species is not *N. stellata* Willd. but *N. capensis* Thunb., the two are not synonymous.

HERMANNIA.

In sinking the genus *Mahernia* a number of name changes have been needed.

The combination *H. verticillata* K. Schum. in Eng. & Prantl Nat. Pflanf. III. 6. 80, 1890, is not valid for *M. verticillata* L. Mant. I. 497. 1767. owing to *H. verticillata* Berg. Desc. Pl. Cap. 169, 1767. The latter is the same as *H. pinnata* L. Sp. Pl. 694. but as Bergius' work was published shortly before the Mantissa the epithet "verticillata" is not valid for this plant. The earliest name seems to be *H. ciliaris* L.F. Suppl. 302, 1784.

The correct citation for *M. scabra* Eck. & Zeyh. is *H. lacera* Fourcade Trans. Roy. Soc. S. Afr. XXI. 101, 1932. This is based on *M. lacera* E. Mey. ex Drège Zwei Pflan. Doc. 130. 1843 which is a name only without description or figure. In this case Meyer's name need not be quoted in the new combination.

SONDERINA.

In removing the South African species that were placed by Sonder in *Ptychotis* from that genus, Wolff (Das Pflanzr. IV. 228. 92. 1927) placed four of the five species in a new genus *Sonderina*. The fifth species, *P. didyma* Sond., Wolff places in the genus *Tragiopsis* Pomel along with two species that are native of N. Africa and the western Mediterranean. *Tragiopsis* Pomel is however antedated by *Tragiopsis* Karst. and not valid. The N. African species have been placed in *Brachyapium* Baill. The problem arises about the position of the S. African species. Both *Sonderina* and *Brachyapium* are genera based on the form of the fruit. *P. didyma* Sond. is much like in general appearance and habit *S. hispida* (Sond.) Wolff. It agrees also in the pinnately compound leaves. The two species of *Brachyapium* which are closely related to one another have ternately compound leaves. *P. didyma* differs from *Sonderina* in the fruit being as broad or broader than long and cordate at the base. The fruit approaches in character those of the species of *Brachyapium* but it has less prominent ridges, is less constricted at the commissure, and is less wide in proportion to its length. Taking all the characters into consideration the more natural arrangement seems to be to place the species in *Sonderina*. This is supported by the geographical distribution, *Brachyapium* occurring in Spain and N.W. Africa, *Sonderina* being wholly South African. The species would be *S. didyma* (Sond.) Adamson comb. nov.

ROELLA.

R. ericoides Good Journ. Bot. LXII. 48. 1924 is antedated by *R. ericoides* Spreng. Syst. I. 723, 1825 and by *R. ericoides* Buek in Eck. & Zeyh. Enum. 385. 1837, and hence cannot stand. The species is distinct and needs a new name. *R. Goodiana* Adamson Comb. nov. is suggested.

ISOLOBUS.

Lobelia (*Isolobus*) *spathulata* Good Journ. Bot. LXII. 50 1924 is very closely allied to *I. Ecklonianus* Sond. and the differences are not more than will justify varietal rank. It is proposed to make the plant a variety, *I. Ecklonianus* var. *spathulatus* (Good) Adamson var. nov. The variety is the only form found on the Peninsula.

II. BY FRANCES M. LEIGHTON.

AGAPANTHUS AFRICANUS (L.) HOFFMGG.

It has long been apparent to those who know the genus *Agapanthus* in the field that more than one species was included under *A. africanus* (L.) Hoffmgg.

The first reference to *Agapanthus* known to the writer appeared in Hermann's Catalogue of 1687, and the earliest figure in Plukenet's

Almagestum in 1696. In this work it is stated that this plant had flowered in the Hampton Court Gardens in 1692. It was figured by Commelyn (Hortus Amstelodamensis 133 t. 67), by Seba (Thesaurus 1, p. 29 t. 19, fig. 4), and by Breynius (Prodromus 1 p. 25). All these figures undoubtedly represent the small *Agapanthus* which grows on the summit and upper slopes of Table Mt. and in other parts of the South-Western Districts.

After the publication of the Species Plantarum, the first figure which appeared was Phillip Miller's in the Gardener's Dictionary p. 140 t. 210 (1760). This represents in the writer's opinion, an overgrown specimen of the form referred to above.

When L'Hèritier in his Sertum Anglicum (1788) established the genus *Agapanthus* he gave the epithet umbellatus to the species but from his citation it is certain that he was describing the small *Agapanthus* only.

The first clear indication of the inclusion of a second species under this name is found in Redouté's Liliacées (1813) t. 403. He states that he recognises two different forms in this species but does not consider the second sufficiently distinct to warrant specific rank. Redouté's figure represents *A. orientalis* [redacted], a larger plant which is found in the southern and eastern parts of South Africa. The distribution of the latter species is from Knysna eastwards along the coastal region to Natal and Zululand and thus it is unlikely that it was introduced to Europe before *A. africanus* (L.) Hoffmgg.

From this time on, there was a tendency to relegate the true *A. africanus* to the rank of a variety or, as in Loddiges Botanical Cabinet 42 (1817), to make a new species of it.

Agapanthus plants respond very quickly to cultivation and there is a marked difference in size between specimens from the wild and those grown in gardens for several years. Hence in drawing up these descriptions the measurements are those of plants from the wild or those which have been only recently introduced into gardens.

A. africanus (L.) Hoffmgg. is very variable in size and general appearance but there is insufficient justification in the writer's opinion for splitting it into species or even varieties.

Agapanthus africanus (L.) Hoffmansegg, Verz. Pfl.: 35 (1824) *A. africanus* (L.) Dur. and Schinz. Consp. Flor. Afr. V : 354 (1893) ; *Crinum africanum* Linn. Sp. Pl. ed. 1. p. 292. (1753) ; *Tulbaghia Heisteri* Fabric. Enum. Pl. Helmstad (1763) ; *Mauhlia linearis* Thunb. Nov. Gen. : III (1781) ; *M. linearis* Thunb. Prod. Pl. Cap. : 60 (1794) ; *M. africana* Dahl. Obs. Bot. Syst. Gen. (1787) ; *Agapanthus umbellatus* L'Hèrit Sert. Angl. p. 17 (1788) ; Aiton Hort. Kew. ed. 1 : 414 (1789) ; Willd Sp. Pl. 2. Pt. 1. 47 (1799) ; Red. Lil. 1 ; 6 (1802) ; Roem. et Schult 7, Pt. 2, 997 (1830) partly; Kunth Enum. IV, p. 478 (1843) excl. vars.; Engl. Naturl. Pfl. II, 5: 53 (1888); *A. umbelliferus* Poir. Encl. Meth. Bot. Suppl. 1: 155 (1810); *A. minor* Lodd. Bot. Cab. 42 (1817).

Rhizome giving rise to thick fibrous roots and to shoots bearing 8—18 foliage leaves and the inflorescence. *Leaves* in two ranks erect or suberect, canaliculate somewhat leathery in texture, apices obtuse or subacute, 10—23 cm. long, 0·9—1·2 cm. broad. *Peduncle* erect, terete, 24—51 cm. high. *Spathe valves* deciduous. *Pedicels* 12—29, 1·5—4·5 cm. long with threadlike bracts arising at their bases. *Perianth* deep blue-violet in colour, 2·5—3·5 cm. long; tube 1—1·3 cm.; segments 1·5—2·2 cm. long; outer 0·5—0·6 cm., inner 0·7—1 cm. broad. *Stamens* up to 0·5 cm. shorter than the perianth. *Pistil* finally as long as the stamens.

Hab. Cape Peninsula: Clearing, Kirstenbosch, *Esterhuysen* 697! Kalk Bay Mt. *Wolley Dod* 758! Stellenbosch: Banhoek, *Martley* Bolus Herbarium 22380! Paarl: Roberts Vlei, *Pillans* 6791. Caledon: Kleinmond, *Fuller* 109! Hangklip, *Pillans* 8330! Riversdale: *Ferguson* Nat. Bot. Gdns. 807/35! Langeberg, *Muir* 1344!

Agapanthus orientalis Leighton sp. nov. *A. umbellatus* Red. Lil. 403 (1813); *A. umbellatus* var. maximus Edward's Bot. Reg. (1843) 7.

Rhizoma crassum. *Folia* 16—20, disticha, succulenta, arcuata, circa 70 cm. longa, ad 5·5 cm. lata. *Pedunculus* erectus, teres, 60 cm. altus et ultra. *Spathae* deciduae. *Pedicelli* saepe ad 110, patentes 9—12 cm. longi bracteis angustissimis basi induti. *Perianthium* coeruleum, 4·2—5·5 cm. longum, tubo 1·5—2 cm. longo, segmentis superne patentibus 2·7—3·5 cm. longis, 3 ext. 0·7—0·8 cm. latis, 3 int. 0·9—1 cm. latis. *Filamenta* demum perianthio aequilonga vel paulo longiora. *Ovarium* 1 cm. longum, stylo ad 3 cm. longo.

Hab. Pondoland: Port St. Johns *Pillans* 7198 (*type* in Bolus Herbarium)! Kentani: Pegler 629! Humansdorp: Diep River, *H. Bolus* 2491!

Rhizome stout, with thick fibrous roots. *Leaves* 16—20, in two ranks, succulent, arcuate, about 70 cm. long, up to 5·5 cm. broad. *Peduncle* erect, terete, 60 cm. or more in length. *Spathe valves* deciduous. *Pedicels* spreading, often as many as 110, 9—12 cm. long with narrow thread-like bracts at the base. *Perianth* blue, 4·2—5·5 cm. long, tube 1·5—2 cm. long, segments spreading 2·7—3·5 cm. long, 3 exterior 0·7—0·8 cm., 3 interior 0·9—1 cm. broad. *Filaments* finally as long as, or a little longer than, the perianth. *Ovary* about 1 cm. long. *Style* up to 3 cm. long.

Further investigation may show this species to be A. *multiflorus* Willd. (Willd. Enum. 353.)

The differences between *A. africanus* (L.) Hoffmgg. and *A. orientalis* Leighton are as follows :

1. *A. africanus* is a smaller plant growing in less dense clusters than *A. orientalis.*
2. The leaves of *A. africanus* are narrow, erect and fairly rigid while those of *A. orientalis* are broad and, owing to their soft character, reflexed from the tips towards the base.
3. The peduncle and pedicels are shorter in *A. africanus.*
4. In *A. africanus* there are fewer flowers in an inflorescence and the perianth segments, relative to the size of the flower, are broader. The perianth is deep blue-violet in *A. africanus* whereas in *A. orientalis* it is of varying shades of sky blue.

To the Director of Kew, the writer is indebted for extracts from several books which were not available in South Africa.

III. By T. M. Salter.

Virgilia oroboides (Berg.) Salter. Comb. nov., vice *Virgilia capensis*, Linn. Mant. (Nov. 1767). First described by Bergius in Berg. Desc. Pl. (Oct. 1767) p. 142, as *Sophora oroboides*, Berg.

Oxalis falcatula, Salter. Nom. nov., vice *Oxalis falcata*, Sond. in Flor. Cap. I. (1860) p. 322. The specific name *falcata* E. and Z. had previously been employed by Ecklon and Zeyher in Enum. Pl. (1835) p. 95 for another species (O. pentaphylla, Sims.).

Oxalis nidulans, E. and Z., var. **denticulata** (W-Dod.) Salter. Var. nov., vice *O. denticulata*, W-Dod. (pars rubra). In the original description of *O. denticulata*, W-Dod. (Journ. Bot. (1900) p. 170) two plants are cited without specifying the *type*. Of these W-Dod. 1265 (alba) is O. nidulans, E. & Z., but 1298 (rosea) is a distinct variety. The trivial name denticulata is here reduced to varietal rank and applied to the red form only. *Schlechter* 7761, which has been cited as O. purpurea, Th. (sensu Sonder) is this variety.

Oxalis pes-caprae, Linn., var **sericea** (L.f.) Salter. Var. nov., vice *O. sericea*, L.f. When all forms of the species *O. pes-caprae*, L. are taken into account, *O. sericea*, L.f. cannot be considered other than a variety.

Oxalis polyphylla, Jacq., var. **pentaphylla** (Sims) Salter. Var. nov., vice *O. pentaphylla*, Sims. The variety is identical with the typical form with the exception that most of the leaves are 5-foliolate. A few of the small outer leaves are usually 3-foliolate. A form otherwise identical occurs near Hermanus in which the leaves are 7-foliolate. Parallel variations in the number of leaflets occur in other species of Oxalis and such variants are mere varieties and not separate species.